

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Independent claim 1 has been amended to incorporate the subject matter of claims 5 and 8, and claims 6 and 9 have been amended to depend from claim 1.

In addition, independent claim 17 has been amended to incorporate the subject matter of claims 21 and 24, and claims 22 and 25 have been amended to depend from claim 17.

Still further, the claims have been amended to make some clarifying improvements so as to put them in better form for issuance in a U.S. patent.

Finally, new claim 33 depending from claim 17 and new claim 34 depending from claim 1 have been added to recite that the recording ink is an aqueous ink containing a pigment as the color material, and that the colorless ink is an aqueous ink containing a dispersed resin and substantially containing no pigment. See the disclosure relating to the recording ink beginning at the bottom of page 50 of the specification, and see the disclosure relating to the colorless ink beginning in the middle of page 63 of the specification.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 1-4, 6, 8, 10, 17-20, 22, 24 and 26 were rejected under 35 USC 102 as being anticipated by JP 2002-307755 ("Takabayashi et al"), and claims 1-4, 8, 9, 11-13, 17-20, 24, 25 and 27-29 were rejected under 35 USC 102 as being anticipated by USP 6,877,850 ("Ishimoto et al"). In addition, claims 5, 15, 16, 21, 31 and 32 were rejected under 35 USC 103 as being obvious in view of Takabayashi et al; claims 5, 15, 21 and 31 were rejected under 35 USC 103 as being in view of Ishimoto et al; claims 7 and 23 were rejected under 35 USC 103 as being obvious in view of the combinations of Takabayashi et al or Ishimoto et al with US 2001/0015745 ("Onishi et al"); and claims 14 and 30 were rejected under 35 USC 103 as being obvious in view of the combination of Ishimoto et al with US 2001/0017642 ("Shigemura"). These rejections, however, are all respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended independent claim 1, an inkjet recording method is provided which comprises: jetting onto a recording medium, by recording heads, recording ink containing a color material and colorless ink for

improving gloss, to perform image formation; and determining an adhered amount of the colorless ink per unit area (to be jetted) in response to an adhered amount of the recording ink per unit area; wherein each said unit area is set as a block formed of an aggregate of n pixels, where $n > 1$, and is set to have a size of 1 mm square or less, and the adhered amount of the colorless ink (to be jetted) for each said unit area is determined such that a sum total of the adhered amounts of the colorless ink and the recording ink in the unit area is at least a predetermined amount.

Moreover, according to the present invention as recited in amended independent claim 17, an inkjet printer is provided which comprises: an image forming unit to jet onto a recording medium, by recording heads, recording ink containing a color material and colorless ink for improving gloss, thereby performing image formation; and a control unit to control the image forming unit, wherein the control unit determines an adhered amount of the colorless ink per unit area (to be jetted) in response to an adhered amount of the recording ink per unit area; and wherein each said unit area is set as a block formed of an aggregate of n pixels, where $n > 1$, and is set to have a size of 1 mm square or less, and the control unit determines the adhered amount of the colorless ink (to be jetted) in each said unit area such that a sum total of the adhered amounts of the colorless ink and the

recording ink in the unit area is at least a predetermined amount.

With this method and structure, even though the gloss of the area (image-formed region) to which the recording ink is adhered is improved (for example by the pigment included in the recording ink as recited in claims 33 and 34), it is possible to improve the gloss of the blank portion and the highlighted portion in which the adhered amount of recording ink is small, by jetting colorless ink for improving gloss (or more specifically, containing a dispersed resin as recited in claims 33 and 34) onto the blank portion and the highlighted portion. As a result, as a whole, unevenness of the gloss is eliminated and even gloss can be obtained.

In more detail, with the method and structure of amended independent claims 1 and 17, an adhered amount of the colorless ink per unit area (to be jetted) is determined in response to an adhered amount of the recording ink per unit area, wherein each said unit area is set as a block formed of an aggregate of n pixels, where $n > 1$, and is set to have a size of 1 mm square or less, and the adhered amount of the colorless ink (to be jetted) for each said unit area is determined such that a sum total of the adhered amounts of the colorless ink and the recording ink in the unit area is at least a predetermined amount. As described in the specification (see, for example, the first paragraph on

page 10, the paragraph bridging pages 70 and 71, and Example 3 on pages 93-95), by controlling the adhered amounts of the inks for unit areas each of which is set at 1mm square or less, it is possible to uniform the unevenness of the gloss, which is shown by seeing the recorded image with the human eye.

As recognized by the Examiner, Takabayashi et al and Ishimoto et al disclose controlling of the adhered amounts of the colorless ink and the recording ink.

However, the cited references do not disclose or suggest determining an adhered amount of the colorless ink for each unit area, wherein each said unit area is set as a block formed of an aggregate of n pixels, where $n > 1$, and is set to have a size of 1 mm square or less, and the adhered amount of the colorless ink for each said unit area is determined such that a sum total of the adhered amounts of the colorless ink and the recording ink in the unit area is at least a predetermined amount.

The cited references do not disclose that evenness of gloss is obtained by defining the resolution relating to the gloss. And it is respectfully submitted that it would not have been obvious to one of ordinary skill in the art to achieve the present invention as recited in amended independent claims 1 and 17, thereby effectively preventing the unevenness of the gloss.

Indeed, the Examiner merely asserts on pages 3 and 4 that Takabayashi et al and Ishimoto et al disclose controlling an

adhered amount of colorless ink with respect to a block formed of an aggregate of n pixels, where $n > 1$, on the grounds that there are more than 1 pixels in an image. It is respectfully pointed out, however, that according to claims 1 and 17, the adhered amount of the colorless ink is determined per unit area in response to an adhered amount of the recording ink per unit area (where the unit area is defined as recited in claims 1 and 17), and the adhered amount of the colorless ink for each said unit area is determined such that a sum total of the adhered amounts of the colorless ink and the recording ink in the unit area is at least a predetermined amount.

Moreover, on pages 5 and 6 of the Office Action, the Examiner acknowledges that neither Takabayashi et al nor Ishimoto et al discloses a unit area being set to have a size of 1 mm square or less. However, the Examiner asserts that this structure of the present invention is obvious "because it is well known in the art that a unit area can be at any measureable amount."

Thus, the Examiner has apparently taken Official Notice with respect to the size of a unit area previously recited in claims 5 and 21, although the Examiner has not used the term "Official Notice." Nevertheless, the Examiner's taking of Official Notice is respectfully traversed, and it is respectfully requested that the Examiner provide documentary evidence to support the taking

of Official Notice, if the Examiner's maintains this position (MPEP 2143.03 C).

More specifically, it is respectfully submitted that the fact asserted by the Examiner is not "capable of instant and unquestionable demonstration as being well-known" as is required when Official Notice unsupported by documentary evidence is taken (MPEP 2143.03 A). Indeed, the feature of the present invention recited in independent claims 1 and 17 whereby the size of each unit area (for which the adhered amount of colorless ink is determined in response to the adhered amount of recording ink) has a size of 1 mm square or less is a feature of the present invention, and the advantageous size of 1 mm square or less was determined by the inventors of the present invention. See, for example, the disclosure in the specification at page 70, line 11 to page 71, line 8. See also, for example, Example 3 on pages 93-95.

It is respectfully pointed out, therefore, that setting a unit area (for which the adhered amount of colorless ink is determined in response to the adhered amount of recording ink) to have a size of 1 mm square or less was not "capable of instant and unquestionable demonstration as being well-known" at the time the present invention was made, and the Examiner's taking of Official Notice is respectfully traversed.

With the features of the present invention recited in claims 33 and 34, moreover, whereby the recording ink is an aqueous ink containing a pigment as said color material, and the colorless ink is an aqueous ink containing a dispersed resin and substantially containing no pigment, the method and structure recited in claims 1 and 17 can achieve particularly advantageous effects, as described in the specification (see the Examples, for example).

In view of the foregoing, it is respectfully submitted that amended independent claims 1 and 17, and all of the claims respective depending therefrom clearly patentably distinguish over Takabayashi et al and Ishimoto et al, taken singly or in combination with any of the other cited references, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

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